

# Our Water

## Keeping it Clean

North Dakota Department of Environmental Quality

## Harmful Algal Blooms

2021 – A Year in Review

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Algae exist naturally in all types of water, from freshwater lakes to salty oceans and seas. Although algae are individually very small, under certain conditions a group (or colony) of algae can grow rapidly and create an algal bloom.

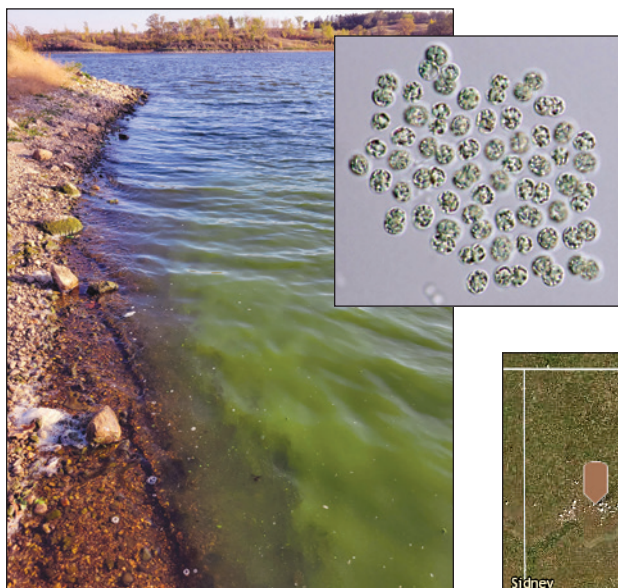
health risks for people and wildlife or become damaging to the environment.

HABs can cover large areas of water, blocking sunlight from reaching other aquatic life, lowering oxygen levels in the water and clogging fish gills.

with toxic algae can cause irritation such as rashes, blisters, swelling and itching. Swallowing or drinking water with toxic algae can severely damage internal organs and is known to have caused pet and livestock death.

The North Dakota Department of Environmental Quality monitors HABs across the state. Staff investigate potential blooms, post warning and advisory signs and work with communities and landowners on nutrient reduction efforts.

In 2021, 62 North Dakota lakes were monitored following reports of potential HABs. Water quality tests identified moderate (Advisory) levels of toxins at 23 sites and high (Warning) levels of toxins at four sites.

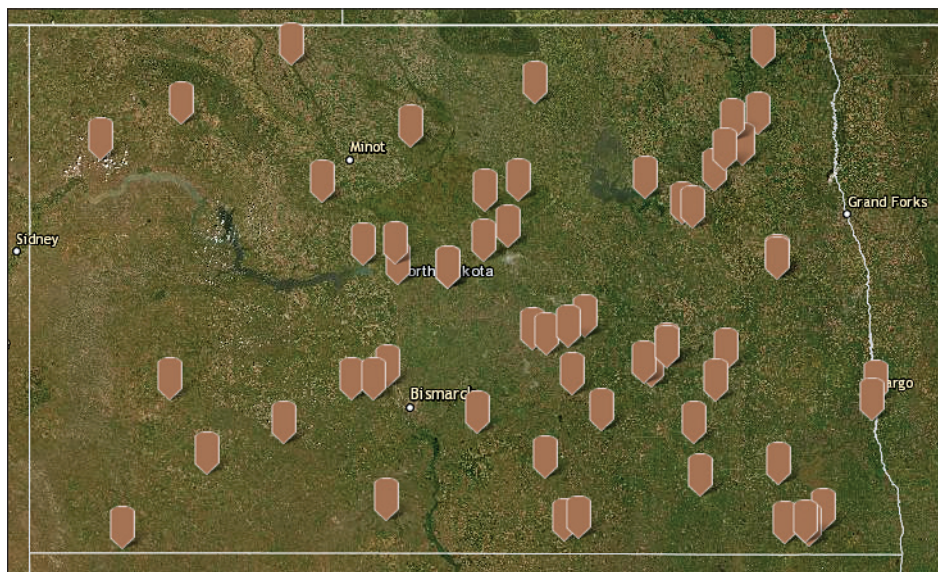


Harmful Algal Bloom in Ransom County.  
(inset) Blue-green algae under a microscope (usgs.gov).

In North Dakota, HABs typically consist of blue-green algae, also known as cyanobacteria. Blue-green algae can produce toxins (microcystins) that present serious health risks for humans and animals. Skin contact

HABs in North Dakota			
Year	Lakes Monitored	Warnings	Advisories
2021	62	4	23
2020	56	9	21
2019	31	3	15

Overview of HABs in North Dakota from 2019-2021.



Reported locations of potential HABs in 2021.

Blooms often occur in summer in standing water (lakes, reservoirs, stock ponds) as a result of excess nutrients (phosphorus and nitrogen) entering the water from fertilizer, livestock and septic systems. Harmful Algal Blooms (HABs) develop when blooms present

Areas with known or suspected HABs are posted with water warning or advisory signs and are recorded on the Environmental Quality website. Visit [deq.nd.gov](http://deq.nd.gov) and enter search criteria “HABs”.

Local public entities such as health units, North Dakota Game and Fish and North Dakota Parks and Recreation also are notified of HAB warnings and advisories.



Water bodies with an HAB warning are known to contain harmful levels of toxic blue-green algae and are unsafe for use.

2021 HABs Warnings	
Water Body	County
Alkali Lake	Sargent
Epping-Springbrook	Williams
Reule Lake	Stutsman
Stump Lake (East)	Nelson



HAB in Stutsman County.

## WATER ADVISORY

**This water may contain blue-green algae that can be harmful to humans and pets.**

Water bodies with an HAB advisory may contain harmful levels of toxic blue-green algae and are potentially unsafe to use or recreate in.

2021 HABs Advisories	
Water Body	County
Alkali Lake	Stutsman
Antelope Lake	Pierce
Barnes Lake	Stutsman
Beaver Lake	Logan
Boom (Marion) Lake	Lamoure
Bowman-Haley Dam	Bowman
Buffalo Lake	Pierce
Buffalo Lodge Lake	McHenry
Bylin Dam	Walsh
Coal Mine Lake	Sheridan
Dead Colt Creek Dam	Ransom
Frettim Lake	Kidder
Froelich Dam	Sioux
Jamestown Reservoir	Stutsman
Lake Hoskins	McIntosh
Lake LaMoure	LaMoure
Lake Tschida	Grant
Patterson Lake	Stark
Pipestem Dam	Stutsman
South Golden Lake	Steele
South Hoffer (McClusky)	Sheridan
Spiritwood Lake	Stutsman
Sweetbriar Dam	Morton

### Know It

Blue-green algae can look like:

- A crust on the water
- Grass clippings
- Green cottage cheese
- Scum
- Spilled green paint or green pea soup

### Avoid It

General safety tips:

- Avoid areas of scum when boating
- Rinse hands with non-lake water after landing fish
- Wash fish thoroughly with tap water before cleaning
- Contact your health provider or veterinarian if you or your pet become ill after swimming
- When in doubt, stay out!

### Report It

Report suspected algal blooms and check lake status online or by phone:

- Visit [deq.nd.gov](http://deq.nd.gov)
- Call 701-328-5210

Sign up for text or email alerts when new HAB water advisories or warnings are posted at [www.deq.nd.gov/subscriptions](http://www.deq.nd.gov/subscriptions).

For more information on Harmful Algal Blooms, contact the Watershed Management Program at 701-328-5210.

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